

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (Canceled)

4. (Previously presented) The process of Claim 31 including providing a free radical scavenger to said cyclotetrasiloxane.

5. (Original) The process of Claim 4 wherein said free radical scavenger is selected from the group consisting of: 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy, 2-tert-butyl-4-hydroxyanisole, 3-tert-butyl-4-hydroxyanisole, propyl ester 3,4,5-trihydroxy-benzoic acid, 2-(1,1-dimethylethyl)-1,4-benzenediol, diphenylpicrylhydrazyl, 4-tert-butylcatechol, N-methylaniline, p-methoxydiphenylamine, diphenylamine, N,N'-diphenyl-p-phenylenediamine, p-hydroxydiphenylamine, phenol, octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate, tetrakis (methylene (3,5-di-tert-butyl)-4-hydroxy-hydrocinnamate) methane, phenothiazines, alkylamidonoisoureas, thiodiethylene bis (3,5,-di-tert-butyl-4-hydroxy-hydrocinnamate, 1,2,-bis (3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl) hydrazine, tris (2-methyl-4-hydroxy-5-tert-butylphenyl) butane, cyclic neopentanetetrayl bis (octadecyl phosphite), 4,4'-thiobis (6-tert-butyl-m-cresol), 2,2'-methylenebis (6-tert-butyl-p-cresol), oxalyl bis (benzylidenehydrazide) and mixtures thereof.

6. (Original) The process of Claim 5 wherein said 2,6-di-tert-butyl-4-methyl phenol is provided in an amount of 50-500 ppm (vol.).

7. (Original) The process of Claim 5 wherein said 2,2,6,6-tetramethyl-1-piperidinyloxy is provided in an amount of 50-230 ppm (vol.).

Claims 8-11 (Canceled)

12. (Previously presented) The process of Claim 33 wherein said free radical scavenger is selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy and mixtures thereof.

13. (Original) The process of Claim 12 wherein said scavenger is provided in an amount of 50-500 ppm (vol.).

14. (Original) The process of Claim 12 wherein said 2,2,6,6-tetramethyl-1-piperidinyloxy is provided in an amount of 50-230 ppm (vol.).

15. (Original) A process for stabilizing 1,3,5,7-tetramethylcyclotetrasiloxane against polymerization used in a chemical vapor deposition process for silicon oxides in electronic material fabrication comprising providing a neutral to weakly acidic polymerization inhibitor to said 1,3,5,7-tetramethylcyclotetrasiloxane and providing a free radical scavenger to said 1,3,5,7-tetramethylcyclotetrasiloxane.

16. (Original) The process of Claim 15 wherein said inhibitor is selected from the group consisting of 2,4-pentanedione, 1-hexanoic acid, glycerol, acetic anhydride, less than 1% (vol.) 1,1,1,5,5,5-hexamethyltrisiloxane and mixtures thereof.

17. (Original) The process of Claim 15 wherein said free radical scavenger is selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy and mixtures thereof.

Claims 18-19 (Canceled)

20. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane and a neutral to weakly acidic polymerization inhibitor and a free radical scavenger.

21. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising (a) 1,3,5,7-tetramethylcyclotetrasiloxane, (b) a neutral to weakly acidic polymerization inhibitor selected from the group consisting of 2,4-pentanedione; 1-hexanoic acid; glycerol; acetic anhydride; less than 1% (vol.) 1,1,1,5,5,5-hexamethyltrisiloxane; less than 1% (vol.) 1,1,1,3,5,5,5-heptamethyltrisiloxane; β -diketones $RC(O)CH_2C(O)R$; aliphatic carboxylic acids $RCOOH$; aliphatic dicarboxylic acids $HOOC-(CH_2)_n-COOH$ in which $1 \leq n \leq 8$; phenols $C_6R_{(6-n)}(OH)_n$ in which $1 \leq n \leq 5$; polyols $CH_2X(CHX)_nCH_2X$, in which $X = H$ or OH but at least one $X = OH$ and $1 \leq n \leq 8$; anhydrides $RCH_2-C(O)-O-C(O)-CH_2R$; hydrosiloxanes $R_3Si-(O-SiR_2)_n-OSiR_3$, in which $0 \leq n \leq 8$, all wherein R is individually selected from the group consisting of hydrogen, normal, branched or cyclic C_{1-10} alkyl groups; and mixtures thereof, and (c) a free radical scavenger selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy, 2-tert-butyl-4-hydroxyanisole, 3-tert-butyl-4-hydroxyanisole, propyl ester 3,4,5-trihydroxy-benzoic acid, 2-(1,1-dimethylethyl)-1,4-benzenediol, diphenylpicrylhydrazyl, 4-tert-butylcatechol, N-methylaniline, p-methoxydiphenylamine, diphenylamine, N,N'-diphenyl-p-phenylenediamine, p-hydroxydiphenylamine, phenol, octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate, tetrakis (methylene (3,5-di-tert-butyl)-4-hydroxy-hydrocinnamate) methane, phenothiazines, alkylamidonoisoureas, thiodiethylene bis (3,5-di-tert-butyl-4-hydroxy-hydrocinnamate, 1,2-bis (3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl) hydrazine, tris (2-methyl-4-hydroxy-5-tert-butylphenyl) butane, cyclic neopentantetrayl bis (octadecyl phosphite), 4,4'-thiobis (6-tert-butyl-m-cresol), 2,2'-methylenebis (6-tert-butyl-p-cresol), oxalyl bis (benzylidenehydrazide) and mixtures thereof.

22. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, and 2,4-pentanedione.

23. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material

fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, and 1-hexanoic acid.

Claim 24 (Canceled)

25. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, and glycerol.

26. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, and acetic anhydride.

27. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, 2,4-pentanedione and a free radical scavenger selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy and mixtures thereof.

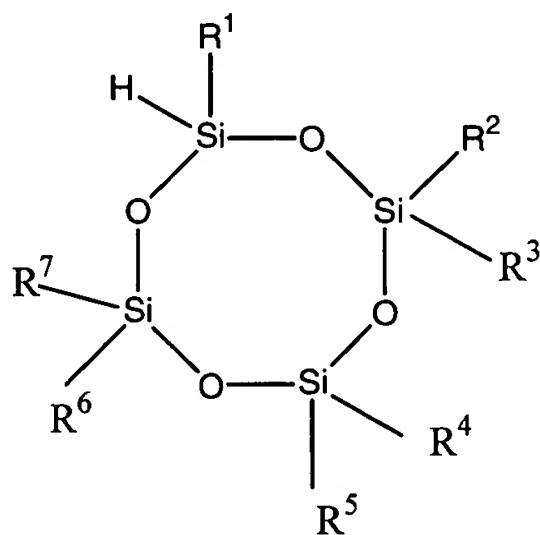
28. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, 1-hexanoic acid and a free radical scavenger selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy and mixtures thereof.

29. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-

tetramethylcyclotetrasiloxane, glycerol and a free radical scavenger selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy and mixtures thereof.

30. (Original) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical vapor deposition process as a precursor for silicon oxides in electronic material fabrication, stabilized against polymerization, comprising 1,3,5,7-tetramethylcyclotetrasiloxane, acetic anhydride and a free radical scavenger selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy and mixtures thereof.

31. (Previously presented) A process for stabilizing a cyclotetrasiloxane against polymerization, the cyclotetrasiloxane having the following formula:



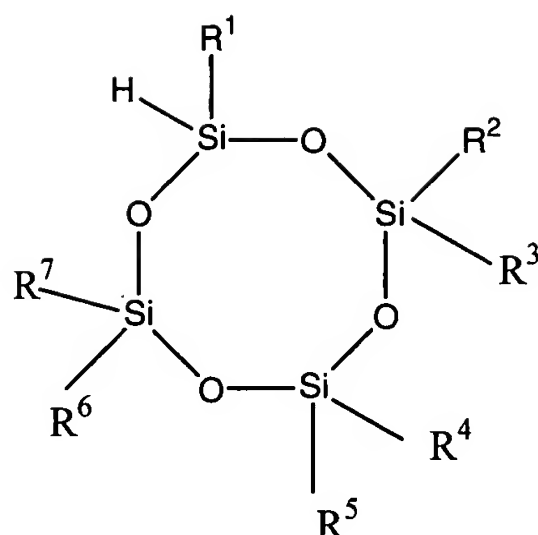
wherein R^{1-7} are individually selected from the group consisting of hydrogen, a normal, branched or cyclic C_{1-10} alkyl group, and a C_{1-4} alkoxy group, the process comprising:

providing an effective amount of an inhibitor to the cyclotetrasiloxane wherein the inhibitor is selected from 2,4-pentanedione; 1-hexanoic acid; glycerol; acetic anhydride; β -diketones $RC(O)CH_2C(O)R$; aliphatic carboxylic acids $RCOOH$; aliphatic dicarboxylic acids $HOOC-(CH_2)_n-COOH$ in which $1 \leq n \leq 8$; phenols $C_6R_{(6-n)}(OH)_n$ in which $1 \leq n \leq 5$; polyols $CH_2X(CHX)_nCH_2X$, in which $X = H$ or OH but at least one $X = OH$ and $1 \leq n \leq 8$; anhydrides $RCH_2-C(O)-O-C(O)-CH_2R$; hydrosiloxanes $R_3Si-(O-SiR_2)_n-OSiR_3$, in which $0 \leq n \leq 8$, all wherein R is individually selected from the group consisting of hydrogen, normal, branched or cyclic C_{1-10} alkyl groups; and mixtures thereof.

32. (Previously presented) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane comprising (a) 1,3,5,7-tetramethylcyclotetrasiloxane, (b) a polymerization inhibitor selected from 2,4-pentanedione; 1-hexanoic acid; glycerol; acetic anhydride; β -diketones $RC(O)CH_2C(O)R$; aliphatic carboxylic acids $RCOOH$; aliphatic dicarboxylic acids $HOOC-(CH_2)_n-COOH$ in which $1 \leq n \leq 8$; phenols $C_6R_{(6-n)}(OH)_n$ in which $1 \leq n \leq 5$; polyols $CH_2X(CHX)_nCH_2X$, in which $X = H$ or OH but at least one $X = OH$ and $1 \leq n \leq 8$; anhydrides $RCH_2-C(O)-O-C(O)-CH_2R$; hydrosiloxanes $R_3Si-(O-SiR_2)_n-OSiR_3$, in which $0 \leq n \leq 8$, all wherein R is individually selected from the group consisting of hydrogen, normal, branched or cyclic C_{1-10} alkyl groups; and mixtures thereof, and (c) a free radical scavenger selected from 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy, 2-tert-butyl-4-hydroxyanisole, 3-tert-butyl-4-hydroxyanisole, propyl ester 3,4,5-trihydroxy-benzoic acid, 2-(1,1-dimethylethyl)-1,4-benzenediol, diphenylpicrylhydrazyl, 4-tert-butylcatechol, N-methylaniline, p-methoxydiphenylamine, diphenylamine, N,N'-diphenyl-p-phenylenediamine, p-hydroxydiphenylamine, phenol, octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate, tetrakis (methylene (3,5-di-tert-butyl)-4-hydroxy-hydrocinnamate) methane, phenothiazines, alkylamidonoisoureas, thiodiethylene bis (3,5-di-tert-butyl-4-hydroxy-hydrocinnamate, 1,2-bis (3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl) hydrazine, tris (2-methyl-4-hydroxy-5-tert-butylphenyl) butane, cyclic neopentanetetrayl bis (octadecyl phosphite), 4,4'-thiobis (6-tert-butyl-m-cresol), 2,2'-methylenebis (6-tert-butyl-p-cresol), oxalyl bis (benzylidenehydrazide) and mixtures thereof.

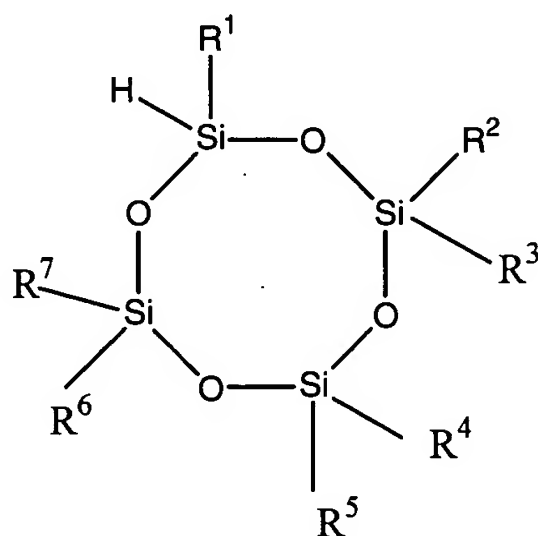
33. (Currently amended) A process for stabilizing 1,3,5,7-tetramethylcyclotetrasiloxane that is used in a chemical vapor deposition process against polymerization during extended periods of heating, the process comprising: providing a free radical scavenger to said 1,3,5,7-tetramethylcyclotetrasiloxane.

34. (Previously presented) A composition of a cyclotetrasiloxane, the composition comprising; (a) said cyclotetrasiloxane having the following formula:



where R^{1-7} are individually selected from the group consisting of hydrogen, a normal, branched or cyclic C_{1-10} alkyl group, and a C_{1-4} alkoxy group, (b) a neutral to weakly acidic polymerization inhibitor; and (c) a free radical scavenger.

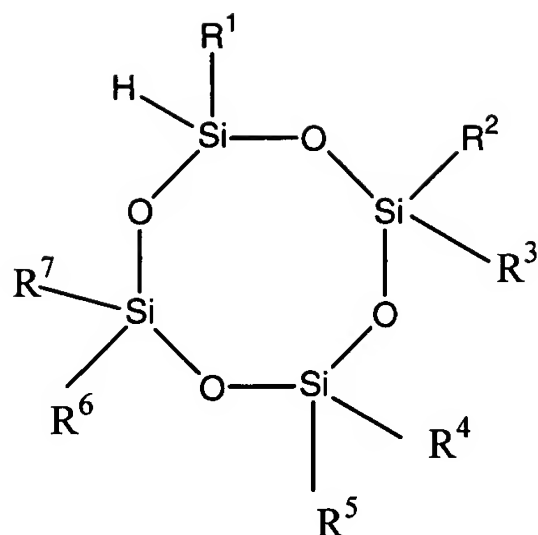
35. (Currently amended) A composition of a cyclotetrasiloxane used in a chemical vapor deposition process, the composition comprising; (a) said cyclotetrasiloxane having the following formula:



where R^{1-7} are individually selected from the group consisting of hydrogen, a normal, branched or cyclic C_{1-10} alkyl group, and a C_{1-4} alkoxy group, and (b) a free radical scavenger wherein the cyclotetrasiloxane is stabilized for extended periods of heating.

36. (New) A composition that is used in a chemical vapor deposition process and is stabilized for extended periods of heating, the composition comprising:

(a) a cyclotetrasiloxane having the following formula:



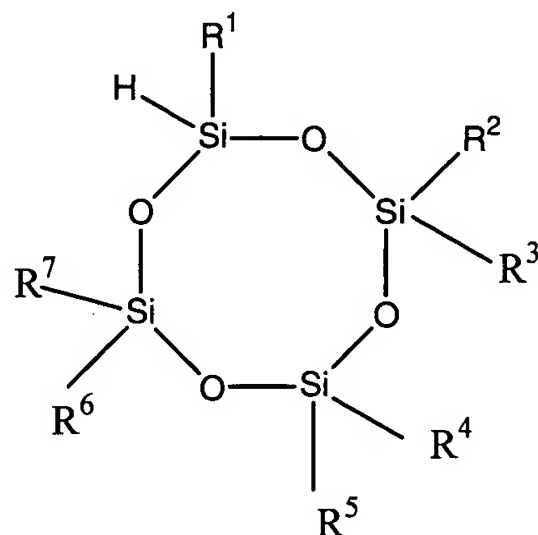
where R^{1-7} are individually selected from the group consisting of hydrogen, a normal, branched or cyclic C_{1-10} alkyl group, and a C_{1-4} alkoxy group; and

(b) a free radical scavenger.

37. (New) The composition of Claim 36 wherein the free radical scavenger is at least one selected from 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy, 2-tert-butyl-4-hydroxyanisole, 3-tert-butyl-4-hydroxyanisole, propyl ester 3,4,5-trihydroxy-benzoic acid, 2-(1,1-dimethylethyl)-1,4-benzenediol, diphenylpicrylhydrazyl, 4-tert-butylcatechol, N-methylaniline, p-methoxydiphenylamine, diphenylamine, N,N'-diphenyl-p-phenylenediamine, p-hydroxydiphenylamine, phenol, octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate, tetrakis (methylene (3,5-di-tert-butyl)-4-hydroxy-hydrocinnamate) methane, phenothiazines, alkylamidonoisoureas, thiodiethylene bis (3,5-di-tert-butyl-4-hydroxy-hydrocinnamate, 1,2-bis (3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl) hydrazine, tris (2-methyl-4-hydroxy-5-tert-butylphenyl) butane, cyclic neopentetetrayl bis (octadecyl phosphite), 4,4'-thiobis (6-tert-butyl-m-cresol), 2,2'-methylenebis (6-tert-butyl-p-cresol), oxalyl bis (benzylidenehydrazide), raw seed oils, wheat germ oils, tocopherols, and gums.

38. (New) A composition of 1,3,5,7-tetramethylcyclotetrasiloxane, used in a chemical deposition process and stabilized for extended periods of heating, comprising 1,3,5,7-tetramethylcyclotetrasiloxane and at least one free radical scavenger selected from the group consisting of 2,6-di-tert-butyl-4-methyl phenol, 2,2,6,6-tetramethyl-1-piperidinyloxy, and mixtures thereof.

39. (New) A process for stabilizing a cyclotetrasiloxane for extended periods of heating wherein the cyclotetrasiloxane is used as a precursor in a chemical vapor deposition process and has the following formula:



where R¹⁻⁷ are individually selected from the group consisting of hydrogen, a normal, branched or cyclic C₁₋₁₀ alkyl group, and a C₁₋₄ alkoxy group, the process comprising: adding a free radical scavenger to the cyclotetrasiloxane.